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6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 51

[EPA-HQ-OAR-2007-0089; FRL-9650-9]

RIN 2060-A017

Air Quality: Revision to Definition of Volatile Organic Compounds - Exclusion of a Group of Four Hydrofluoropolyethers (HFPEs)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The EPA is proposing to revise the agency's definition of volatile organic compounds (VOCs) for purposes of preparing State Implementation Plans (SIPs) to attain the national ambient air quality standard (NAAQS) for ozone under Title I of the Clean Air Act (CAA). This proposed revision would add four chemical compounds to the list of compounds excluded from the definition of VOC on the basis that each of these compounds makes a negligible contribution to tropospheric ozone formation. These compounds consist of four hydrofluoropolyethers (HFPEs) which are identified as $\text{HCF}_2\text{OCF}_2\text{H}$ (also known as HFE-134), $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{H}$ (also known as HFE-236cal2), $\text{HCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (also known as HFE-338pcc13), and $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (also known as H-Galden 1040X or H-Galden ZT 130 (or 150 or 180)). In

addition, the EPA is proposing to make certain technical corrections to the current list of exempt compounds at 40 CFR 51.100(s)(1).

DATES: Comments must be received on or before **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

Public Hearing: If anyone contacts us requesting us to hold a public hearing by **[INSERT DATE 15 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**, we will hold a public hearing.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2007-0089, by one of the following methods:

- www.regulations.gov. Follow the on-line instructions for submitting comments.
- Email: Comments may be sent by electronic mail (email) to a-and-r-Docket@epa.gov. Attention Docket ID No. EPA-HQ-OAR-2007-0089.
- Fax: Fax your comments to: 202-566-1741, Attention Docket ID no. EPA-HQ-OAR-2007-0089.
- Mail: Send your comments to: Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, Mail Code: 2822T, 1301 Constitution Ave., NW, Washington, D.C. 20460, Attention Docket ID No. EPA-HQ-OAR-2007-0089.
- Hand Delivery: U.S. Environmental Protection Agency, EPA West (Air Docket), 1301 Constitution Avenue, Northwest, Room 3334, Washington, D.C. 20004. Attention: Docket ID No. EPA-HQ-OAR-2007-0089. Such deliveries are only accepted during the Docket's

normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-HQ-OAR-2007-0089. The EPA's policy is that all comments received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider as CBI or otherwise protected information through www.regulations.gov, or email. The www.regulations.gov website is an "anonymous access" system, which means that the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through www.regulations.gov, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form

of encryption, and be free of any defects or viruses. For additional instructions on submitting comments, go to

<http://www.epa.gov/epahome/dockets.htm>.

Docket: All documents in the docket are listed in the www.regulations.gov index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Office of Air and Radiation Docket and Information Center, EPA West, Room 3334, 1301 Constitution Ave., NW, Washington, D.C. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Office of Air and Radiation Docket and information Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: David Sanders, Office of Air Quality Planning and Standards, Air Quality Policy Division, State and Local Programs Group, Mail Code (C539-01), Environmental Protection Agency, Research Triangle Park, N.C. 27711; telephone (919) 541-3356 or fax (919) 541-0824; and email address: sanders.dave@epa.gov.

SUPPLEMENTARY INFORMATION:

I. General Information

A. Does this action apply to me?

Entities potentially affected by this proposed rule include, but are not necessarily limited to, states (typically state air pollution control agencies) that control VOCs, and industries listed in the following table involved in the manufacture or use of fire suppressants and specialized refrigerants in secondary loop refrigeration systems for heat transfer.

This proposed rule is applicable to all manufacturers, distributors, and users of these chemical compounds.

Industry group	SIC ^a	NAICS ^b
Fire Suppression	2899	325998, 423990
Refrigerants	2869, 3585	238220, 336111

^a Standard Industrial Classification.

^b North American Industry Classification System.

B. What should I consider as I prepare my comments for the EPA?

Submitting CBI: Do not submit this information to the EPA through www.regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the

information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

C. How can I find information about a possible public hearing?

To request a public hearing or information pertaining to a public hearing on this document, contact Ms. Pamela S. Long, Air Quality Policy Division, Mail code C504-01, U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone (919) 541-0641, facsimile number (919) 541-5509, electronic email address: long.pam@epa.gov.

D. How is this preamble organized?

The information presented in this preamble is organized as follows:

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II. Background

A. VOC Exemptions

Tropospheric ozone, commonly known as smog, is formed when VOCs and nitrogen oxides (NO_x) react in the atmosphere in the presence of sunlight. Because of the harmful health effects of ozone, the EPA and state governments limit the amount of VOCs that can be released into the atmosphere. VOCs are those organic compounds of carbon which form ozone through atmospheric photochemical reactions. Different VOCs have different levels of reactivity -- that is, they do not react to form ozone at the same speed or do not form ozone to the same extent. Some VOCs react slowly, or form less ozone; therefore, changes in their emissions have limited effects on local or regional ozone pollution episodes. It has been the EPA's policy that organic compounds with a negligible level of reactivity should be excluded from the regulatory definition of VOC so as to focus VOC control

efforts on compounds that do significantly increase ozone concentrations. The EPA also believes that exempting such compounds creates an incentive for industry to use negligibly reactive compounds in place of more highly reactive compounds that are regulated as VOCs. The EPA lists these negligibly reactive compounds in its regulations (at 40 CFR 51.100(s)) and excludes them from the definition of VOC.

The CAA requires the regulation of VOCs for various purposes. Section 302(s) of the CAA specifies that the EPA has the authority to define what this term means, and hence what compounds shall be treated as VOCs for regulatory purposes. The policy of excluding negligibly reactive compounds from the VOC definition was first set forth in the "Recommended Policy on Control of Volatile Organic Compounds" (42 FR 35314, July 8, 1977) and was supplemented most recently with the "Interim Guidance on Control of Volatile Organic Compounds in Ozone State Implementation Plans" (Interim Guidance) (70 FR 54046, September 13, 2005). The EPA uses the reactivity of ethane as the threshold for determining whether a compound has negligible reactivity. Compounds that are less reactive than, or equally reactive to, ethane under certain assumed conditions may be deemed negligibly reactive and therefore suitable for exemption from the regulatory definition of VOC. Compounds that are more reactive than ethane continue to be considered VOCs for regulatory purposes and

therefore subject to control requirements. The selection of ethane as the threshold compound was based on a series of smog chamber experiments that underlay the 1977 policy.

The EPA has used three different metrics to compare the reactivity of a specific compound to that of ethane: (i) the reaction rate constant (known as k_{OH}) with the hydroxyl radical (OH); (ii) the maximum incremental reactivities (MIR) of ethane and the compound in question expressed on a reactivity per mass basis; and (iii) the MIR of ethane and the compound in question expressed on a reactivity per mole basis. Differences between these three metrics are discussed below.

The k_{OH} is the reaction rate constant of the compound with the OH radical in the air. This reaction is typically the first step in a series of chemical reactions by which a compound breaks down in the air and participates in the ozone-forming process. If this step is slow, the compound will likely not form ozone at a very fast rate. The k_{OH} values have long been used by the EPA as a measure of photochemical reactivity and ozone-forming activity, and they have been the basis for most of the EPA's previous exclusions of negligibly reactive compounds. The k_{OH} metric is inherently a molar comparison, i.e., it measures the rate at which molecules react.

The MIR values, both by mole and by mass, are a more recently developed measure of photochemical reactivity derived from a

computer-based photochemical model. This measurement considers the complete ozone forming activity of a compound, not merely the first reaction step. Further explanation of the MIR metric can be found in: W. P. L. Carter, "Development of Ozone Reactivity Scales for Volatile Organic Compositions," Journal of the Air & Waste Management Association, Vol. 44, 881-899, July 1994.

The MIR values for compounds are typically expressed as grams of ozone formed per gram of VOC (mass basis), but may also be expressed as grams of ozone formed per mole of VOC (molar basis). For comparing the reactivities of two compounds, using the molar MIR values considers an equal number of molecules of the two compounds. Alternatively, using the mass MIR values compares an equal mass of the two compounds, which will involve different numbers of molecules, depending on the relative molecular weights. The molar MIR comparison is consistent with the original smog chamber experiments that underlie the original selection of ethane as the threshold compound and compared equal molar concentrations of individual VOCs. It is also consistent with previous reactivity determinations based on inherently molar k_{OH} values. By contrast, the mass MIR comparison is more consistent with how MIR values and other reactivity metrics have been applied in reactivity-based emission limits, such as the national VOC emissions standards for aerosol coatings (73 FR 15604). Many other VOC regulations contain limits based upon a weight of VOC

per volume of product, such as the EPA's regulations for limiting VOC emissions from architectural and industrial maintenance coatings (65 FR 7736). However, the fact that regulations are structured to measure VOC content by weight for ease of implementation and enforcement does not necessarily control whether VOC exemption decisions should be made on a weight basis as well.

The choice of the molar basis versus the mass basis for the ethane comparison can be significant. Given the relatively low molecular weight of ethane, use of the mass basis tends to result in more VOCs being classified as "negligibly reactive" than in the case of the molar basis. In some cases, a compound might be considered less reactive than ethane and eligible for VOC exemption under the mass basis but not under the molar basis.

In this proposed action, the EPA relies on the k_{OH} metric because of the availability of relevant data. No reported calculations of MIR values on a molar or mass basis were found for these compounds. Thus, the EPA relies on the k_{OH} metric.

The EPA's 2005 Interim Guidance also notes that concerns have sometimes been raised about the potential impact of a VOC exemption on environmental endpoints other than ozone concentrations, including fine particle formation, air toxics exposures, stratospheric ozone depletion, and climate change. The EPA has recognized, however, that there are existing regulatory and non-regulatory programs that are

specifically designed to address these issues, and the agency continues to believe that the impacts of VOC exemptions on environmental endpoints other than ozone formation will be adequately addressed by these programs. The VOC exemption policy is intended to facilitate attainment of the ozone NAAQS, and questions have been raised as to whether the agency has authority to use its VOC policy to address concerns that are unrelated to ground-level ozone. Thus, in general, VOC exemption decisions will continue to be based solely on consideration of a compound's contribution to ozone formation. However, if the agency determines that a particular VOC exemption is likely to result in a significant increase in the use of a compound and that the increased use would pose a significant risk to human health or the environment that would not be addressed adequately by existing programs or policies, the EPA reserves the right to exercise its judgment in deciding whether to grant an exemption.

In this case, the agency has examined available information on the risks to human health and the environment and applicability of other regulatory programs; that information for the four compounds considered here is discussed further in Section III.

B. Petitioned Compounds to List as Negligibly Reactive: HCF₂OCF₂H (HFE 134), HCF₂OCF₂OCF₂H (HFE-236cal2), HCF₂OCF₂CF₂OCF₂H (HFE-338pcc13), and HCF₂OCF₂OCF₂CF₂OCF₂H (H-Galden 1040X and H-Galden ZT 130 (or 150 or 180))

On February 10, 2005, Solvay Solexis, Incorporated submitted to the EPA a petition requesting that four compounds in the family of products known by the trade name H-Galden be added to the list of compounds that are considered to be negligibly reactive in the definition of VOC at 40 CFR 51.100(s). These four compounds -- $\text{HCF}_2\text{OCF}_2\text{H}$ (HFE-134), $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{H}$ (HFE-236cal2), $\text{HCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (HFE-338pcc13), and $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (H-Galden 1040X and H-Galden ZT 130 (or 150 or 180)) -- can be used in some heat transfer applications (as refrigerants) and as fire suppressants.

In both the refrigeration and fire suppressant end uses, these HFPEs would be used as substitutes for ozone-depleting substances (ODS) and thus have either undergone or would need to undergo review by the EPA's Significant New Alternatives Policy (SNAP) Program. The SNAP Program is EPA's program to evaluate and regulate substitutes for the ozone-depleting chemicals that are being phased out under the stratospheric ozone protection provisions of the CAA. In Section 612(c) of the CAA, the agency is authorized to identify and publish lists of acceptable and unacceptable substitutes for class I or class II ozone-depleting substances.¹ The EPA's SNAP program has evaluated the use of H-Galden HFPEs and found acceptable their use as fire suppressants in non-residential applications, in place of Halon 1211

¹Information on the SNAP program can be found on the following webpage: www.epa.gov/ozone/snap.

(68 FR 4004, January 27, 2003). However, the SNAP program has not approved H-Galden HFPEs for certain other uses (i.e., solvent, aerosol propellant, foam blowing, and refrigeration). There currently is no submission pending review to list these substances as substitutes in other uses. Thus, at this time, it would be a violation of the CAA and the SNAP program regulations for any person to introduce H-Galden HFPEs into interstate commerce for use in other end uses regulated by the SNAP program. H-Galden HFPEs may be used in non-mechanical heat transfer as a secondary refrigerant in secondary-loop refrigeration systems without approval from SNAP; the EPA does not list, and does not currently require notification for, compounds that are used only as a secondary fluid in secondary-loop refrigeration systems (62 FR 10702; March 10, 1997).

With respect to the photochemical reactivity of the H-Galden compounds, Solvay Solexis, Incorporated provided information on the photochemical reactivity of its chemical compounds as measured by each compound's k_{OH} rate constant. Measurements of the reaction rate of HCF_2OCF_2H (HFE-134) with OH have been estimated at 298 K to be 2.9×10^{-15} ($cm^3/molecule\text{-}sec$). This rate constant is highly temperature dependent and decreases at lower temperatures. The calculated reaction rates for the three additional HFPEs submitted by Solvay Solexis are 2.4×10^{-15} ($cm^3/molecule\text{-}sec$) for HFE-236cal2, 4.7×10^{-15} ($cm^3/molecule\text{-}sec$) for HFE-338pcc13, and 4.9×10^{-15} ($cm^3/molecule\text{-}sec$)

for H-Galden 1040X. The k_{OH} values for these four HFPEs are significantly lower than the reaction rate for ethane which has a k_{OH} value of 2.4×10^{-13} (cm³/molecule-sec) at 298 K.

The scientific information that the petitioner submitted in support of the petition has been added to the docket for this rulemaking. This docketed information includes journal articles where the rate constant values can be found. Solvay Solexis, Incorporated submitted the following articles in support of its petition: (1) "Tropospheric Degradation Products of Novel Hydrofluoropolyethers," Tuazon, Environmental Science & Technology, University of California, Riverside, May 1997; (2) "Hydrofluoropolyethers," Marchionni, Silvani, Fontana, Malinverno, Visca, Journal of Fluorine Chemistry, Ausimont SpA, R & D Centre, 1999; and (3) "Toxicological Profile of Hydrofluoropolyethers," Malinverno, Colombo, Visca, Regulatory Toxicology and Pharmacology, December, 2004.

Information in the Solvay Solexis, Incorporated petition and its reference material indicates that the four HFPEs have low acute toxicity, no irritation or skin sensitization, and no detectable genotoxic activity in vitro or in vivo. The HFPEs show a similarly low potential for developmental toxicity. This toxicity information has been placed in the docket for this rulemaking.

III. The EPA Response to the Petition

Consistent with the Interim Guidance, the EPA's proposed response to the petition is based on a consideration of the contribution that each chemical makes to tropospheric ozone formation based on a comparison of reactivity metrics, and our assessment that existing programs or policies already adequately address the possibility that granting the petition would pose a significant risk to human health or the environment. Information on these topics is given below.

A. Contribution to Tropospheric Ozone

Table 1 summarizes the information provided by the petitioner regarding the photochemical reactivity of the compounds under consideration. The data submitted by the petitioner support the contention that the reactivity of these compounds, with respect to reaction with the OH radical in the atmosphere, is lower than that of ethane.

Table 1. Summary of reaction rates with OH (k_{OH}) reaction rate constant compared to ethane.

Chemical Formula	CAS Number	Name	k_{OH} ($\text{cm}^3/(\text{mole cule-sec})$) ¹	k_{OH} ratio relative to ethane
C_2H_6	74-84-0	ethane	2.4×10^{-13}	1.00
$\text{HCF}_2\text{OCF}_2\text{H}$	1691-17-4	HFE-134	2.3×10^{-15}	0.01

HCF ₂ OCF ₂ OCF ₂ H	78522-47-1	HFE- 236ca1 2	2.4x10 ⁻¹⁵	0.01
HCF ₂ OCF ₂ CF ₂ OCF ₂ H	188690-78-0	HFE- 338pcc 13	4.7x10 ⁻¹⁵	0.02
HCF ₂ OCF ₂ OCF ₂ CF ₂ OCF ₂ H	188690-77-9	H- Galden 1040X	4.9x10 ⁻¹⁵	0.02

Note

1. K Tokuhashi et al., Journal of Physical Chemistry A, 104, 1165 (2000).

B. Likelihood of Risk to Human Health or the Environment

Additionally, we examined and present available information on the likelihood of risk to human health or the environment from increased use of the chemicals considered here. We believe that current regulation of these compounds under other EPA programs adequately protects human health and the environment.

The EPA's SNAP program has reviewed the potential impacts of the H-Galden HFPEs on human health and the environment, including stratospheric ozone depletion and global warming potential (GWP). From a human health standpoint, use of HFPEs as a streaming agent fire suppressant in non-residential applications does not pose a significant risk as compared to other available substitutes with the same end use. Because HFPEs do not contain chlorine or bromine, these compounds do not contribute to the depletion of the ozone layer and have ozone depletion potential values of zero. These HFPEs have

significant GWPs, comparable to those for hydrofluorocarbons also used as fire suppressants. The SNAP program listed H-Galden HFPEs as acceptable substitutes for Halon 1211 subject to narrowed use limits (for use only in non-residential applications) because they reduce overall risk to human health and the environment in the listed end use and application (68 FR 4004, January 27, 2003).

Table 2 shows the 20 and 100 year GWPs of these four compounds relative to carbon dioxide (CO₂) as reported by the Intergovernmental Panel on Climate Change. These GWP-100 levels are comparable to mid-range levels associated with some chemical compounds that have previously been exempted from the VOC definition, which range from 23 to 12,000. We invite the public to submit comments and additional information relevant to this issue and whether such information should be considered in connection with the decision to grant an exemption from the regulatory definition of VOC.

Table 2. Summary of global warming potentials relative to CO₂ over 20 and 100 years for the four compounds being considered for VOC exemptions.

Chemical Formula	CAS Number	Name	GWP relative to CO ₂ (20 years) ¹	GWP relative to CO ₂ (100 years)
HCF ₂ OCF ₂ H	1691-17-4	HFE-134	12200	6320
			8000	2800

HCF ₂ OCF ₂ OCF ₂ H	78522-47-1	HFE-236ca12		
HCF ₂ OCF ₂ CF ₂ OCF ₂ H	188690-78-0	HFE-338pcc13	5100	1500
HCF ₂ OCF ₂ OCF ₂ CF ₂ OCF ₂ H	188690-77-9	H-Galden 1040X	6320	1870
CO ₂	124-38-9	Carbon dioxide	1	1

Note

1. Forster, P., V. Ramaswamy, P. Artaxo, T. Berntsen, R. Betts, D.W. Fahey, J. Haywood, J. Lean, D.C. Lowe, G. Myhre, J. Nganga, R. Prinn, G. Raga, M. Schulz and R. Van Dorland, 2007: Changes in Atmospheric Constituents and in Radiative Forcing. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

C. Conclusion

In summary, for all four compounds, the EPA believes that (a) these chemicals qualify as negligibly reactive with respect to their contribution to tropospheric ozone formation, and (b) any non-tropospheric ozone-related risks associated with potential increased use are adequately addressed by other existing programs and policies. We invite the public to submit comments and additional information relevant to the issue of these compounds' overall risks and benefits to human health and the environment, and on whether such information should be considered in connection with the decision to grant an exemption from the regulatory definition of VOC.

IV. Proposed Action

The EPA hereby proposes to amend its definition of VOC at 40 CFR 51.100(s) to exclude a group of four HFPE's identified as $\text{HCF}_2\text{OCF}_2\text{H}$ (known as HFE-134), $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{H}$ (known as HFE-236cal2), $\text{HCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (known as HFE-338pcc13), and $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (known as H-Galden 1040X and also H-Galden ZT 130 (or 150 or 180)) as VOCs for ozone SIP and ozone control purposes. If an entity uses or produces any of these four HFPE compounds and is subject to the EPA regulations limiting the use of VOC in a product, limiting the VOC emissions from a facility, or otherwise controlling the use of VOC for purposes related to attaining the ozone NAAQS, then the compound will not be counted as a VOC in determining whether these regulatory obligations have been met. This action may also affect whether any of these four HFPE compounds are considered as VOCs for state regulatory purposes to reduce ozone formation, if a state relies on the EPA's definition of VOC. States are not obligated to exclude from control as a VOC those compounds that the EPA has found to be negligibly reactive. However, if this action is made final, states may not take credit for controlling these compounds in their ozone control strategies.

The EPA is also proposing to make certain technical corrections to the current list of exempt compounds at 40 CFR 51.100(s)(1) by

replacing several commas separating individual compounds with semicolons and by removing the erroneous "(1)" notation in "(1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)" so that it reads "1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300)".

V. Statutory and Executive Order Reviews

A. Executive Orders 12866: Regulatory Planning and Executive Order 13563: Improving Regulation and Regulatory Review

Under Executive Order (EO) 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it raises novel legal or policy issues arising out of legal mandates. Accordingly, the EPA submitted this action to the Office of Management and Budget (OMB) for review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011) and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Burden is defined at 5 CFR 1320.3(b). It does not contain any recordkeeping or reporting requirement.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an

agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the proposed rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) A small business that is a small industrial entity as defined in the U.S. Small Business Administration (SBA) size standards. (See 13 CFR 121.); (2) A governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) A small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This proposed rule will not impose any requirements on small entities.

We continue to be interested in the potential impacts of the proposed rule on small entities and welcome comments on issues related to such impacts.

D. Unfunded Mandates Reform Act

This action contains no federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538 for state, local, or tribal governments or the private sector. The action imposes no enforceable duty on any state, local or tribal governments or the private sector. Therefore, this action is not subject to the requirements of sections 202 and 205 of the UMRA.

This action is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This proposed action addresses the exemption of a set of chemical compounds from the VOC definition. Thus, Executive Order 13132 does not apply to this rule. In the spirit of Executive Order 13132, and consistent with the EPA policy to promote communications between the EPA and

state and local governments, the EPA specifically solicits comment on this proposed rule from state and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). It will not have substantial direct effects on tribal governments, on the relationship between the federal government and Indian Tribes, or on the distribution of power and responsibilities between the federal government and Indian Tribes, as specified in Executive Order 13175. Thus, Executive Order 13175 does not apply to this rule. In the spirit of Executive Order 13175, and consistent with the EPA policy to promote communications between the EPA and Tribal governments, the EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in EO 12866. While this proposed rule is not subject to the Executive Order, the EPA has reason to believe that ozone has a disproportionate effect on active children who play outdoors (62 FR 38856-38859, July 18, 1997). The EPA has not identified any specific

studies on whether or to what extent the chemical compound may affect children's health. The EPA has placed the available data regarding the health effects of this chemical compound in Docket No. EPA-HQ-OAR-2007-0089.

The public is invited to submit comments or identify peer-reviewed studies and data, of which the EPA may not be aware, that assess results of early life exposure to the chemical compounds herein.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This proposed rule is not a "significant energy action" as defined in Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. This action proposes to revise the EPA's definition of VOCs for purposes of preparing SIPs to attain the NAAQS for ozone under title I of the CAA.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer Advancement Act of 1995 ("NTTAA"), Public Law No. 104-113, section 12(d), (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent

with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, with explanations when the agency decides not to use available and applicable voluntary consensus standards.

This proposed rulemaking does not involve technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, Feb. 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that this proposed rule will not have disproportionately high and adverse human health or

environmental effects on minority or low-income populations because it will not affect the level of protection provided to human health or the environment.

List of Subjects in 40 CFR Part 51

Environmental protection, Administrative practice and procedure, Air pollution control, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

March 15, 2012
Dated:

Lisa P. Jackson,
Administrator.

For reasons set forth in the preamble, part 51 of chapter I of title 40 of the Code of Federal Regulations is proposed to be amended as follows:

Part 51-REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS.

1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101; 42 U.S.C. 7401-7671q.

§51.100 [Amended]

2. In § 51.100 in paragraph (s)(1) introductory text, remove the words "methyl acetate, 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C₃F₇OCH₃, HFE-7000), 3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2- (trifluoromethyl) hexane (HFE-7500), 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea), methyl formate (HCOOCH₃), (1) 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy- 4-trifluoromethyl-pentane (HFE-7300); propylene carbonate; dimethyl carbonate; and perfluorocarbon compounds which fall into these classes:" and add in their place the words "methyl acetate; 1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C₃F₇OCH₃, HFE-7000); 3-ethoxy- 1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2- (trifluoromethyl) hexane (HFE-7500); 1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea); methyl formate (HCOOCH₃); 1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy- 4-trifluoromethyl-pentane (HFE-7300); propylene carbonate; dimethyl

carbonate; $\text{HCF}_2\text{OCF}_2\text{H}$ (HFE134); $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{H}$ (HFE-236cal2);
 $\text{HCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (HFE-338pcc13); $\text{HCF}_2\text{OCF}_2\text{OCF}_2\text{CF}_2\text{OCF}_2\text{H}$ (H-Galden 1040x or
H-Galden ZT 130 (or 150 or 180)); and perfluorocarbon compounds which
fall into these classes:"

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